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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,507	09/10/2003	Akihiko Ito	S004-5098	3606

7590 08/11/2005

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EXAMINER

PEGGINS, KRISTAL J

ART UNIT	PAPER NUMBER
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2861

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/659,507

Applicant(s)

ITO, AKIHIKO

Examiner

K. Feggins

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-14 is/are rejected.
- 7) ☐ Claim(s) 4-5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claim 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by Masummura et al. (US 5,366,302).

Masummura et al. discloses the following claimed limitations:

* regarding claim 1, a thermal printer in which printing is performed while paper is sandwiched between a thermal head/11, 111/ having a heating element and a platen roller (Abstract, figs 2-5);

* a first frame/1, 102/ that movably holds the head support body/10, 110/ on which is mounted the thermal head/11, 111/, (figs 2-5);

* biasing member/spring, 5/ means disposed between the head support body/10, 110/ and the first frame/1/ for applying a pressing force between the thermal head and the platen roller/P/ (col 2, lines 54-68, col 3, lines 1-2, figs 2-5);

* a second frame/101/ that holds the first frame/1, 102/ and the platen roller/P/, wherein the thermal head/11, 111/, the head support body/10, 110/, and the biasing means/5/ are detachably attachable to the second frame/101/ in the state of being assembled with the first frame/1, 102/ (figs 2-5, col 5, lines 8-16).

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* regarding claim 2, wherein the second frame has a receiving groove for holding a rotating shaft of the platen roller (see fig 3);

* the first frame has a hook portion/lever/ that is hooked round a component held in the receiving groove, and also serves as lock member that locks the platen roller to prevent it from being released from the receiving groove (col 3, lines 40-68, figs 2-5).

* regarding claim 3, wherein attachment and detachment of the first frame and second frame are made possible through opening and closing of a fixture that enables fixation and release with one operation or through attachment and detachment of a screw (col 3, lines 40-68, figs 2-5).

* regarding claim 6, a thermal printer (Abstract)

* an outer frame (figs 2-5);

* a platen roller rotatably supported by the outer frame (figs 2-5);

* an inner frame detachably attachable to the outer frame and having assembled thereon a head support body, a thermal head supported by the head support body, and one or more biasing members for urging the head support body toward the platen roller to apply a pressing force between the thermal head and the platen roller (figs 2-5, col 5, lines 8-16);

* wherein the inner frame together with the head support body, the thermal head and the one or more biasing members are detachable as an assembled unit from the outer frame (figs 2-5).

* regarding claim 7, wherein the one or more biasing members/5/ are disposed between a wall of the inner frame and the head support body (figs 2 & 4).

* regarding claims 8 & 12, wherein the inner frame is disposed within the outer frame with opposite side walls of the inner frame facing respective opposite side walls of the outer frame, the opposite side walls of the inner and outer frames having holes through which slidably extends a shaft that detachably attaches the inner frame to the outer frame (fig 3);

* regarding claims 9 & 13, further including means for releasably restraining axial sliding movement of the shaft to prevent the shaft from being withdrawn from the holes in the outer frame (fig 3, col 3, lines 38-68, figs 4-5).

* regarding claims 10 & 14, further including a fixture releasably connected to the outer frame to prevent withdrawal of the shaft from the holes in the outer frame, the fixture being releasable from the outer frame to permit withdrawal of the shaft from one of the holes in the outer frame (fig 3, col 3, lines 38-68, figs 4-5).

* regarding claim 11, wherein the outer frame has two spaced-apart receiving grooves/102j/ for rotatably supporting the platen roller (figs 1 & 3);

* the inner frame has two hook portions/102j/ that cooperate with respective receiving grooves to retain the platen roller on the outer frame (figs 2-3).

Response to Arguments

3. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection. Please see above rejection Masummura et al that disclose a thermal printer having a platen roller, a head mounting bracket having a thermal head attached and a head holder for removably containing the head mounting bracket.

Allowable Subject Matter

4. Claims 4-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter of claims 4-5 is the inclusion of the limitations of a thermal printer that includes retainment of the fixing means is released to permit the support shaft to slide in the movable range, whereby the support shaft is made to fall out from the bearing hole of the second frame while the support shaft is passed through the first frame and the head support body to make the first frame removable from the second frame. It is this limitation found in the claim, as it is claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sekiya (US 6,249,302 B1) disclose a thermal printing having a platen roller that cannot be removed from the frame. Mori et al. (US 6,450,714 B2) disclose a thermal printer with a movable platen by a pin. Louis (6567113 B2) discloses an openable and lockable thermal printer device.

Communication With The USPTO

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Feggins whose telephone number is 571-272-2254. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talbott Dave can be reached on 571-272-1934. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 8/65
K. FEGGINS
PRIMARY EXAMINER